Appendix table 7-8

## Correct answers to trend factual knowledge of science questions, by respondent characteristic: 1992–2012

(Average percent correct)

Characteristic	1992 (n = 1,995)	1995 (n = 2,006)	1997 ( $n = 2,000$ )	1999 (n = 1,882)	2001 (n = 1,574)	2006 (n = 1,864)	2008 (n =2,021)	2010 (n = 1,932)	2012 (n = 2,256)
Sex									
Male	64	65	66	66	69	69	68	67	70
Female	55	55	55	57	59	60	60	59	60
Formal education									
< High school	44	44	43	44	45	44	43	42	45
High school diploma	59	59	60	62	62	62	63	60	62
Bachelor's degree	73	68	75	77	80	74	77	78	78
Graduate/professional	80	77	80	83	80	82	81	80	81
Science/mathematics education <sup>a</sup>									
Low	52	52	51	53	55	56	57	54	56
Middle	66	68	66	71	72	69	70	68	70
High	79	80	83	82	84	82	82	83	83
Family income (quartile)									
Тор	NA	NA	NA	NA	NA	71	74	73	76
Second	NA	NA	NA	NA	NA	69	69	69	69
Third	NA	NA	NA	NA	NA	65	63	63	63
Bottom	NA	NA	NA	NA	NA	56	56	54	55
Age (years)									
18–24	59	63	64	65	66	68	67	64	67
25–34	64	64	63	65	68	64	67	67	67
35–44	65	64	66	66	66	67	63	63	67
45–54	61	62	61	64	68	68	67	65	64
55–64	53	52	57	58	61	64	65	63	64
≥ 65	47	47	45	46	49	53	54	54	61
Verbal ability <sup>b</sup>									
0–4	NA	NA	NA	NA	NA	48	47	46	46
5	NA	NA	NA	NA	NA	60	58	55	59
6	NA	NA	NA	NA	NA	66	63	63	66
7	NA	NA	NA	NA	NA	70	73	67	73
8–10	NA	NA	NA	NA	NA	77	80	80	81

NA = not available, question not asked.

NOTES: This table shows the percentage of the nine questions in the trend factual knowledge of science scale that were answered correctly. "Don't know" responses and refusals to respond count as incorrect. Questions in the trend factual knowledge of science scale are listed below:

- The center of the Earth is very hot. (True)
- · All radioactivity is man-made. (False)
- It is the father's gene that decides whether the baby is a boy or a girl. (True) or (in 2008) It is the mother's gene that decides whether the baby is a boy or a girl. (False) (Split ballot in 2008; 1,506 survey respondents were asked about "father's gene"; 515 survey respondents were asked about "mother's gene.")
- · Lasers work by focusing sound waves. (False)
- Electrons are smaller than atoms. (True)
- Antibiotics kill viruses as well as bacteria. (False)
- The continents on which we live have been moving their locations for millions of years and will continue to move in the future. (True)
- Does the Earth go around the Sun, or does the Sun go around the Earth? (Earth around Sun)
- How long does it take for the Earth to go around the Sun? (One year) (Asked only if the respondent answered correctly that the Earth goes around the Sun.)

SOURCES: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Public Attitudes Toward and Understanding of Science and Technology (1992–2001); University of Chicago, National Opinion Research Center, General Social Survey (2006–12).

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<sup>&</sup>lt;sup>a</sup> Low = ≤ 5 high school and college science/mathematics courses; middle = 6–8 courses; high = ≥ 9 courses.

<sup>&</sup>lt;sup>b</sup> Measure is based on correct responses to a 10-item, multiple-choice test of vocabulary knowledge. Categories represent the number of correct responses.